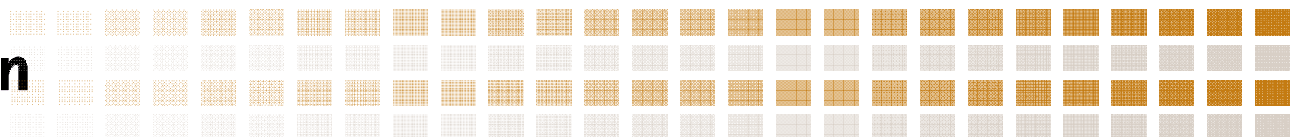


# COLLIN COUNTY GASB 45 RESULTS

*July 20, 2009*



**Milliman**





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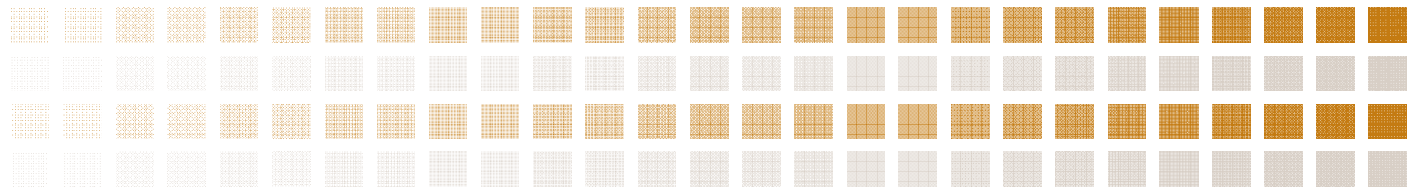
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# GASB 45

## 1. Background



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GASB 45 relates to liabilities associated with providing postemployment benefits to former employees of Collin County.

Postemployment benefits typically include medical, dental, vision, hearing, disability, life insurance, and long term care.

Prior to GASB 45, these benefits were accounted for on a cash basis as benefits were incurred. Under GASB 45, however, these benefits are to be expensed on an accrual basis.

Collin County first complied with GASB 45 for fiscal year ending September 30, 2008. The initial annual required contribution (expense) was \$7.9 million compared with paid claims of roughly \$0.4 million.

Valuations for Collin County are required at least biennially. However, significant changes in plan design and population may require an interim valuation to be performed. Additionally, any change that might require a revision to any of the long-term assumptions might require an interim valuation.

Since the initial valuation, the underlying plan design has not changed and the population has remained stable. However, the prior valuation relied upon a discount rate of 5%.

Under GASB 45, the discount rate should reflect the long-term expected return on those plan assets used to finance these benefits.

Since Collin County does not currently fund these benefits through a trust, the discount rate assumption is tied to the expected rate of return on general company assets.



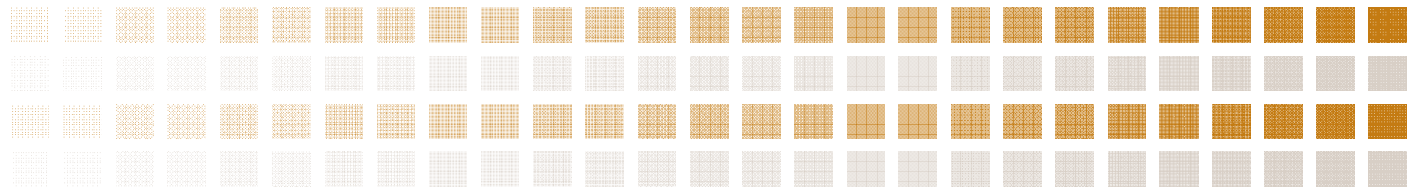
GASB 45



## 2. SUMMARY OF INPUTS



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# Participant Data

ACTIVE EMPLOYEES		
	2009	2007
Employees	1,448	1,290
Average age	43.7	43.7
Average service (years)	8.3	8.5
% Married at retirement	80	100

RETIREEES		
	2009	2007
<b>Medical</b>		
Retirees	33	33
Spouses	<u>16</u>	<u>19</u>
Total with Medical	49	52
<b>Dental</b>		
Retirees	64	50
Spouses	<u>28</u>	<u>25</u>
Total Dental	92	75



# Key Assumptions

Discount rate:	4.0% per annum, compounded annually
Retirement rates:	from TCDRS report
Withdrawal rates:	from TCDRS report
Disability rates:	from TCDRS report
Mortality rates:	1994 UP Mortality Table (gender specific)
Election rates:	5% of those retiring “early” are assumed to elect health coverage
	80% of those retiring under the normal retirement provisions are assumed to elect health coverage
Spouse elections:	80% of spouses are assumed to elect health coverage

## Key Medical Assumptions

Claim costs in future years equal the starting claim costs adjusted for the assumed ongoing cost trends. Such trends are based on the health care cost trend rate adjusted for impact of plan design, cost containment features and Medicare coordination.

Healthcare Cost Trend Rates	
Duration	Rate
1	7.80%
2	7.30%
3 – 6	6.70%
7 - 11	6.60%
12 - 17	6.50%
18 – 23	6.40%
24	6.30%
25	6.20%
...	...
89+	4.90%

Dental Trend Rates	
Duration	Rate
1	5.66%
2	5.53%
3	5.39%
4	5.26%
5	5.12%
6	4.99%
7	4.85%
8	4.72%
...	...
15+	4.00%

## 2 Summary of Inputs

Expected Per Capita Retiree Healthcare / Dental Costs*						
Age	Male	Female		Age	Male	Female
45	\$4,643	\$6,015		45	\$431	\$431
50	\$6,118	\$7,094		50	\$431	\$431
55	\$8,175	\$8,547		55	\$431	\$431
60	\$10,762	\$10,325		60	\$431	\$431
64	\$13,291	\$12,066		64	\$431	\$431
65	\$4,033	\$3,994		65	\$431	\$431
70	\$5,137	\$4,773		70	\$431	\$431
75	\$6,270	\$5,620		75	\$431	\$431
80	\$7,194	\$6,351		80	\$431	\$431
85	\$8,080	\$7,135		85	\$431	\$431

\* The per capita costs shown in this table is based solely upon claims and enrollment experience provided by Collin County and their healthcare provider.

## Retiree Contributions

Pre - 65		
	Employee	Spouse
Advantage	\$8,520	\$1,500
Advantage Plus	\$8,820	\$2,136
Dental	\$264	\$264

Post - 65				
	8-10 YOS	11-15 YOS	16-19 YOS	20+ YOS
Advantage Retiree / Spouse	\$5,602	\$3,735	\$1,867	\$120
Advantage Plus Retiree / Spouse	\$6,197	\$4,131	\$2,066	\$420
Dental Retiree	\$210	\$140	\$70	\$24



GASB 45



### 3. VALUATION PROCESS



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## Illustration Of Valuation Methodology

Simplified Example For Active Employee*	
Age at hire:	27
Current age:	42
Assumed retirement age:	52
Assumed age at death:	81
Assumed pre-65 annual claims:	\$5,000
Assumed post-65 annual claims:	\$3,750

- Total pre-65 payments:  $13 \times \$5,000 = \$65,000$
- Total post-65 payments:  $16 \times \$3,750 = \$60,000$
- Total value of future benefits: \$125,000
- Actuarial accrued liability:  $\$125,000 \times 15/25 = \$75,000$

\* To simplify this example, we have ignored, among other things, interest discounting AND medical inflation. In general, those two items have the opposite effect on actuarial accrued liability.

## Illustration Of Valuation Methodology

Simplified Example For Retired Employee*	
Age at hire:	N/A
Current age:	65
Assumed retirement age:	N/A
Assumed age at death:	81
Assumed pre-65 annual claims:	N/A
Assumed post-65 annual claims:	\$3,750

- Total pre-65 payments: \$0
- Total post-65 payments:  $16 \times \$3,750 = \$60,000$
- Total value of future benefits: \$60,000
- Actuarial accrued liability: \$60,000

\* To simplify this example, we have ignored, among other things, interest discounting AND medical inflation. In general, those two items have the opposite effect on actuarial accrued liability.

# GASB 45

## 4. RESULTS



## Actuarial Balance Sheet

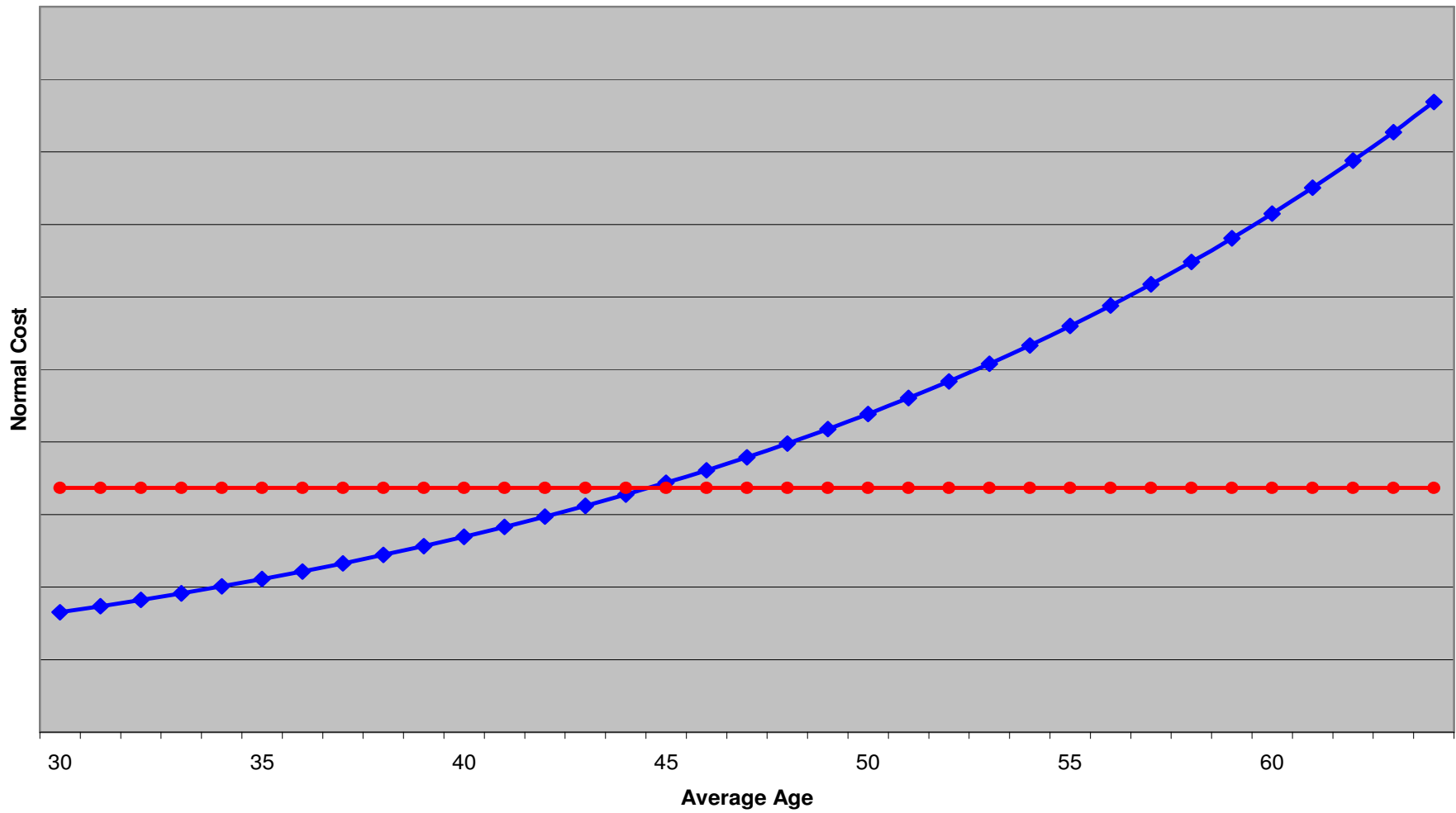
	2009 @ 4.00%	2007 @ 5.00%
<b>A. Actuarial Present Value Of Future Benefits</b>		
Actuarial Present Value Of Future Benefits	\$93,053,377	\$86,562,948
<b>B. Assets And Future Employer Contributions</b>		
Plan Assets	\$ 0	\$ 0
Actuarial Accrued Liability	<u>37,461,770</u>	<u>57,216,264</u>
Unfunded Actuarial Accrued Liability	\$ 37,461,770	\$ 57,216,264

# Key Changes in Valuation

Discount rate:	Reduced rate from 5.0% to 4.0%
Election rates (medical):	Increased those electing coverage if retiring early from 0% to 5%
	Decreased those electing coverage if retiring normal from 100% to 80%
Spouse elections (medical):	Decreased from 100% to 80%
% Married assumption:	Decreased from 100% to 80%
Cost method:	Moved from entry age normal (EAN) to projected unit credit cost method (PUC)

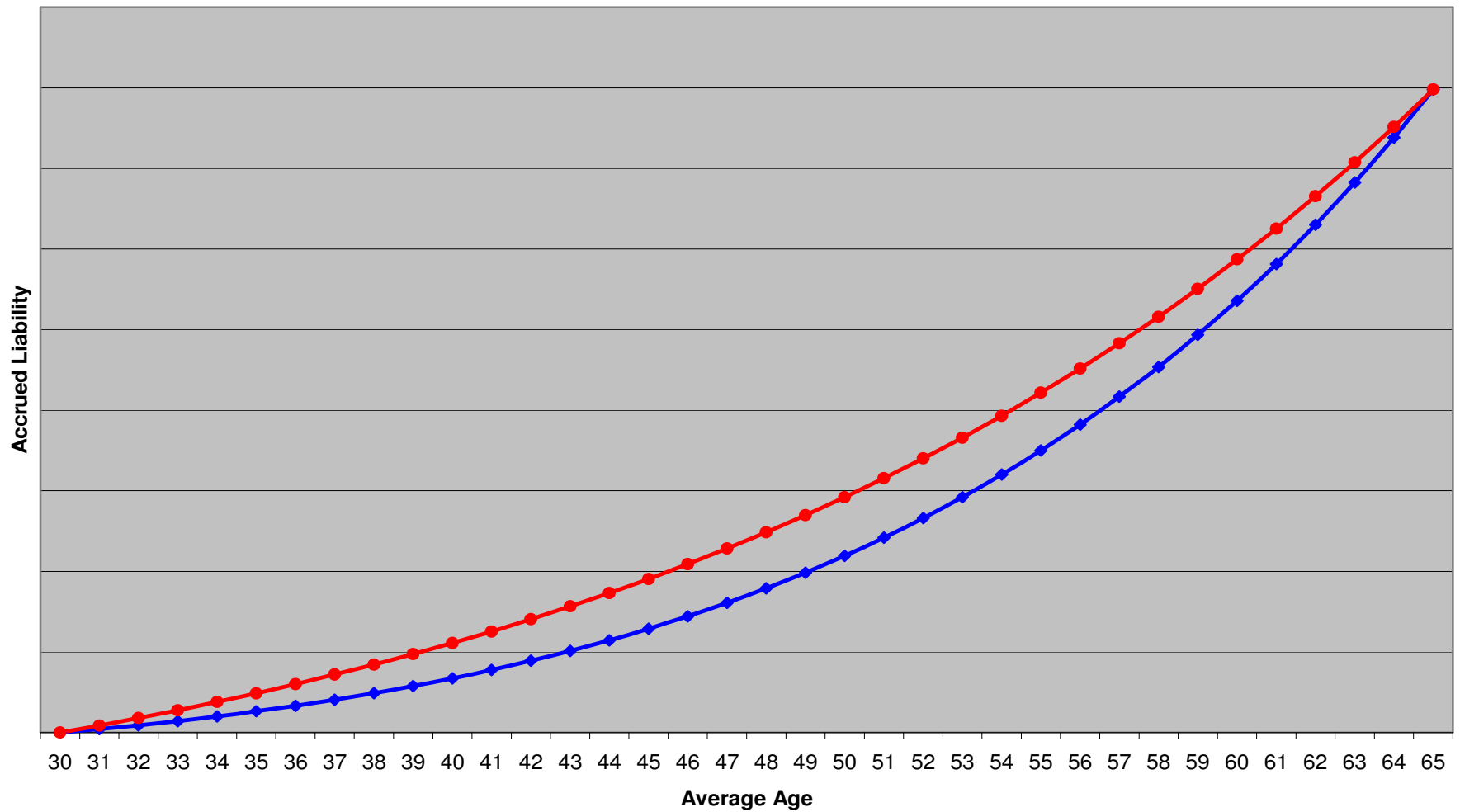
## 2 Summary of Inputs

Normal Cost Comparison



## 2 Summary of Inputs

Accrued Liability Comparison



## 4 Results

# Annual Required Contribution (ARC)

	2008 (5%)	2009 (4%)
<b>A. Employer Normal Costs</b>		
(1) Current Year Normal Cost as of beginning of fiscal year	\$3,936,874	\$3,850,170
(2) Assumed Interest to the end of the year	\$ 196,844	\$ 154,007
(3) Current Year Normal Cost as of end of fiscal year [(1) + (2)]	\$4,133,718	\$4,004,177
<b>B. Determination Of Current Year Amortization Payment</b>		
(1) Unfunded Actuarial Accrued Liability	\$57,216,264	\$37,461,770
(2) Amortization period	30 years	29 years
(3) Level Dollar Amortization Factor	\$ 16.1411	\$ 17.6631
(4) Amortization Amount as of beginning of fiscal year [(1) / (3)]	\$ 3,544,762	\$ 2,120,906
(5) Assumed Interest to the end of the year	177,238	84,836
(6) Amortization Amount as of end of fiscal year [(4) + (5)]	\$ 3,722,000	\$ 2,205,742
<b>C. Determination Of Annual Required Contribution</b>		
(1) Normal Cost For Benefits Attributable To Service In The Year (A.3)	\$4,133,718	\$4,004,177
(2) Amortization Of Unfunded Actuarial Liability (B.6.)	\$3,722,000	\$2,205,742
(3) Annual Required Contribution [(1) + (2)]	\$7,855,718	\$6,209,919

## 4 Results

### Estimated Medical Cash Flows\*

Year	Total Claims	Total Contributions	Net
2009	\$ 496,911	\$ 375,416	\$ 121,495
2010	634,807	444,380	190,427
2011	784,707	524,096	260,611
2012	923,982	603,238	320,744
2013	1,152,659	725,739	426,920
2014	1,391,507	861,456	530,051
2015	1,590,612	1,014,499	576,113
2016	1,916,632	1,179,559	737,073
2017	2,273,454	1,361,402	912,052
2018	2,669,675	1,519,541	1,150,134
2019	3,115,098	1,696,220	1,418,878
2020	3,541,905	1,874,639	1,667,266
2021	4,024,238	2,039,789	1,984,449
2022	4,561,939	2,215,540	2,346,399
2023	5,102,907	2,378,720	2,724,187
2024	5,675,209	2,532,593	3,142,616
2025	6,287,960	2,692,245	3,595,715
2026	6,909,019	2,830,188	4,078,831
2027	7,529,345	2,958,519	4,457,826
2028	8,169,042	3,071,463	5,097,579

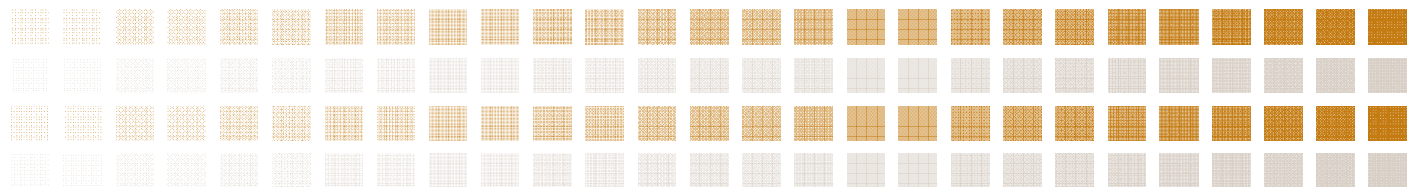
\* Amounts shown are based on the current benefit structure and premium amounts and assuming that all actuarial assumptions are met in each future year. Claims amounts include expenses. To the extent that actual experience deviates from that expected, results may vary.

# GASB 45

## 5. POTENTIAL NEXT STEPS



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## Alternatives include . . .

- Continuing pay-as-you-go
- Set up a trust to fund OPEB obligation with employer contributions
- Review retiree contribution methodology for pre-65 plan
- Capping or reducing benefits to reduce OPEB liability



## Changing the benefit structure typically includes . . .

- Reducing benefits for future retirees
- Reducing benefits for current and future retirees
- Reviewing retiree cost sharing approach
- Switching to a defined contribution approach

## Design Techniques

- Index plan features (*deductibles, out-of-pocket maximums*)
- Index retiree contributions
- Develop service-based retiree contribution schedule
- Develop dollar cap on employer contributions
- Limit employer cost growth to fixed percentage
- Modify eligibility (*age, service, combination*)

## Funding Considerations

- No requirement to fund
- Only required to measure the obligation and accrue costs on an actuarial basis
- Without assets to fund the liabilities, costs are likely to continue increasing
- Consequences of not funding
  - Lower discount rate
  - Larger unfunded liability
  - Larger net OPEB obligation on financial statements

## Advantages Of Funding

- Lower plan costs (*higher return on assets than general fund*)
- Lower the accounting liability and expense
  - Higher expected return on assets
  - Higher discount rate
- Reduce potential impact of OPEB liability on borrowing costs
- More secure benefits to retirees

## Other Issues To Consider

- Appropriate funding vehicle – 401(h), Section 115, VEBA
- Legal/administrative requirements with funding
- Impact on credit rating
- Implicit rate subsidies
- Alternative funding method
- OPEB bonds (similar to Pension Obligation Bonds)